



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## VARIOUS.

## NICKEL PLATING IRON.

Böttger states that nickel is preferable to any other metal whatever for plating iron. Gold in a thin coat is very porous; nickel, on the contrary, forms a ductile and impermeable envelope.

*Revue Industrielle.*

## CLEANING BRONZES.

By dipping fustian in soluble glass, and washing it with soap directly afterwards, we get a fabric largely impregnated with silica, which will be found very well adapted for cleaning bronzes, &c. Samples of the material were in the Vienna Exhibition, and attracted some notice.

*Revue Industrielle.*

## EXTRACTION OF IRON-FILINGS FROM THE EYE.

Iron filings have a way of embedding themselves in the eye, which defies almost every ordinary means of extraction. For their removal a small blunt-pointed bar of steel *well magnetized* will be found excellent, and we should recommend workmen liable to such injuries to keep such an instrument about them. It would be a good plan to insert it in a penknife handle, like a blade.

*Scientific American.*

## ELY CHAPEL.

It has long been expected that St. Etheldredo's Chapel, in Ely-Place, was still possessed of its ancient timber roof, although carefully concealed by modern disfigurements; and any doubts on the subject were recently set at rest when, by removing slates in a line up to the ridge, a roof in the simple and severe style adopted by fourteenth-century architects was laid bare. Its construction is that of a coupledrafter roof. There is no ridge-piece, and no longitudinal tie except the two wall-plates and the external boarding. The rafters averaging 8 in. by 6 in. laid flatways, are about 9 in. apart. There is a vertical strut framed into the inner wall-plate and the rafters, and above are cross-pieces and a collar, all about 8 in. by 4 in. All the pieces are united by double tenons, and secured with projecting wooden pegs. The material used appears to be chesnut-wood, and is in good preservation. The architects, Mr. John Young jun. and Mr. Bernard Whelan, were enabled to make a measured drawing of this interesting piece of ancient carpentry.

*The Builder.*

## ROMAN MOSAICS, ITALICA (NEAR SEVILLA).

To those interested in the archæological remains of Southern Spain, it may not be without interest to know that Senor Demetrio de los Rios, of Chipiona, has of late years collected a considerable mass of valuable data bearing upon the history of Itálica, the birth-place of the Emperors Trajan, Hadrian, and Theodosius. The *Athenaeum* says, Senor Rios is about to attempt to galvanise these grey bones into life, having completed for the press a work entitled "Itálica" containing carefully-worked drawings to scale of the mosaics, &c., which have been discovered since Laborde issued his magnificent folio (1806) and embracing an elaborate account (with coloured plates) of the mosaic discovered in 1799, by a monk of San Isidoro (a neighbouring convent), who, at his own expense, erected a wall to enclose it; wall and mosaic were both destroyed by Soult and his braves during the French occupation of the South of Spain. In 1872, the owner of the "weeds and olive groves" being interested in archæology, commenced excavations, uncovering about forty-nine square (Spanish) metros; in 1873, an atrium was discovered, and in 1874, under the auspices of his widow, and mainly at his expense, 800 square metros more were uncovered, forming, apparently, the groundplan of some Roman building of importance.

## RESISTANCE OF COMPRESSED CLAY BRICKS.

Some experiments have been made at the *Berliner Gewerbe-Akademie* with twenty-five samples of machine-pressed clay bricks made by Schlickeyson's process at the Hessian manufactory at Cassel. The results, which show a uniformity of strength very uncommon in bricks, gave in the whole twenty-five an average of

216,44 kilog. per square centm. as the force required to produce fracture, and 292,70 kilog. per square centm. as the crushing weight.

*Stummer's Ingr.*

## CHEAP ARTIFICIAL STONE.

Carr' patents a process for the manufacture of a cheap and indestructible artificial stone. He finds that a mixture of fat lime slaked to powder with clay reduced to an impalpable powder by calcination at a cherry-red heat, when subjected to a high pressure, has the property of hardening rapidly under water, and exhibits a degree of durability proportionate to the pressure it has undergone.

*Revue Industrielle.*

## PAPER WARE.

Our forefathers would have been astonished and incredulous had they been told that in 1871 men would have imbibed the habit of making drinking cups out of directories, or bread-pans out of obsolete hymn-books. It might even now surprise some of the publishers of the West to know that the "Sledge Hammer" or the "County Bugle", which they publish, is likely to enter into the composition of a fancy washbowl, a milkpan or pail, or even a spittoon, and return to them "after many days", gaily enamelled and decorated, ready for other uses. Yet these wonders are being performed daily in our city, and we would not be surprised to know that we are destined to-morrow to eat dinner from a copy of the "Reporter" which had strayed into the mills of Jennings Brothers, and had been ground, baked, and decorated into a first-class household utensil. Messrs. Jennings Brothers have shown a great deal of enterprise in the matter of their Japanese paper ware, which is now selling at 352, Pearl Street, New York, in such a lively manner that the country will soon know what it means. The great advantage of the material is that it is perfectly light and easily handled, has no rough joints or obstructions, does not rust out, shrink, leak, or break, requires no repairs, and is really superior to anything in wood or metal, from the variety of purposes for which it can be used. The process of manufacture is kept, of course, to some extent a secret. But it is easily seen that the material is tough, fibrous, and elastic. In the enamelling process, the articles are subjected to extraordinary heat, which virtually glazes them and makes them able to resist acids and other destroying agents, which so readily enter the fibre of wood or the pores of metal, to their eventual destruction. The milk-pails manufactured by the house will be particularly popular, being perfectly inodorous and non-conductors. These, as well as house-pails of all descriptions, are, it should be stated, entirely without hoops, and are made from a single piece of material. The paper, being pulped, is pressed into shape, dried, enamelled, and subjected to a heat which would destroy some utensils of the kind. Farmers will find these goods particularly valuable, from the fact that they can lay them aside after the busy season and find them again as good as new. There is no moth to corrupt them, and nothing upon which rust can fasten. Visitors to New York who are interested in the improvement of our "useful ware", should visit Jennings Brothers' establishment, and note the great variety of useful utensils they have already added to their list. They will find the prices much lower than they would have thought, and receive a philosophical explanation of where some at least of the old newspapers go to. They will get, at any rate, some idea of American enterprise.

*New York Paper Trade Journal.*

## OIL-COLOUR ON CEMENT.

Oil colours cannot generally be applied over cement, as they will not adhere. M. Garcin adopts the following method of preparing the surface of the cement to receive the colour:

1. Priming with boiling linseed oil.
2. A coating of white lead mixed with oil.
3. A ground coat composed of white lead, Spanish white oxide of iron, and red lead ground together in oil.

*Revue Industrielle.*